

GLOBAL MANAGEMENT OF LOCAL LINK POWER CONSUMPTION

ABSTRACT

Methods, and arrangements for power reduction in links, such as transmitters and
5 receivers, based upon global decisions such as the data transmission frequencies,
communications media, and traffic types associated with links, are disclosed. In particular,
embodiments take advantage of high-level decisions by reconfiguring internal circuits of
transmitters and receivers of links to reduce power consumption. At the global level, a decision
determines the links that are active, the data frequency at which the links operate, and the media
10 through which the links transmit the data. At the local level, the links receive the decisions and
reconfigure circuitry automatically to minimize power based upon the decisions. In some
embodiments, the links may receive the decisions in the form of power modes. In further
embodiments, the links may receive settings such as on/off settings, data frequency settings, and
traffic/media settings, the combination of which indicates power modes.